

[illegible]

FIG. 1A

2184 TTACCTTTGTGCTGGAAGAAACGATTGCATCATTGATAAAATTCTGAAGGAAAAACTGCCAGCATGCCGCTATCGGAA
728▶ Y L C A G R N D C I I D K I R R K N C P A C R Y R K
2262 ATGTCCTTCAGGCTGGAATGAACCTTGAAGCTCGAAAAACAAAGAAAAAATCAAAGGGATTTCAGCAAGCCACTGCAGG
754▶ C L Q A G M N L E A R K T K K K I K G I Q Q A T A G
2341(GR526)
2340 AGTCTCACAAGACACTTCGGAAAAATCCTAACAAAACAATAGTTCCTGCAGCATTACCACAGCTCACCCCTACCTTGGT
780▶ V S Q D T S E N P N K T I V P A A L P Q L T P T L V
2418 GTCACCTGCTGGAGGTGATTGAACCCGAGGTGTTGTATGCAGGATATGATAGCTCTGTTCCAGATTTCAGCATGGAGAAT
806▶ S L L E V I E P E V L Y A G Y D S S V P D S A W R I
2496 TATGACCACACTCAACATGTTAGGTGGGCGTCAAGTGATTGCAGCAGTGAAATGGGCAAAGGCGATACTAGGCTTGAG
832▶ M T T L N M L G G R Q V I A A V K W A K A I L G L R
2574 AAACCTTACACCTCGATGACCAAATGACCCTGCTACAGTACTCATGGATGTTTCTCATGGCATTTCGCTTGGGTTGGAG
858▶ N L H L D D Q M T L L Q Y S W M F L M A F A L G W R
2652 ATCATACAGACAATCAAGCGGAAACCTGCTCTGCTTTGCTCCTGATCTGATTATTAATGAGCAGAGAATGTCTCTACC
884▶ S Y R Q S S G N L L C F A P D L I I N E Q R M S L P
2730 CTGCATGTATGACCAATGTAAACACATGCTGTTTGTCTCCTCTGAATTACAAAGATTGCAGGTATCCTATGAAGAGTA
910▶ C M Y D Q C K H M L F V S S E L Q R L Q V S Y E E Y
2808 TCTCTGTATGAAAACCTTACTGCTTCTCTCCTCAGTTCTTAAGGAAGGTCTGAAGAGCCAAGAGTTATTTGATGAGAT
936▶ L C M K T L L L L S S V P K E G L K S Q E L F D E I
2886 TCGAATGACTTATATCAAAGAGCTAGGAAAAGCCATCGTCAAAAGGGAAGGGAAGTCCAGTCAGAACTGGCAACGGTT
962▶ R M T Y I K E L G K A I V K R E G N S S Q N W Q R F
2964 TTACCAACTGACAAAGCTTCTGGACTCCATGCATGAGGTGGTTGAGAATCTCCTTACCTACTGCTTCCAGACATTTTT
988▶ Y Q L T K L L D S M H E V V E N L L T Y C F Q T F L
3042 GGATAAGACCATGAGTATTGAATTCCCAGAGATGTTAGCTGAAATCATCACTAATCAGATACCAAATATTCAAATGG
1014▶ D K T M S I E F P E M L A E I I T N Q I P K Y S N G
3120 AAATATCAAAAAGCTTCTGTTTCATCAAAAATGA
1040▶ N I K K L L F H Q K •

FIG. 1B

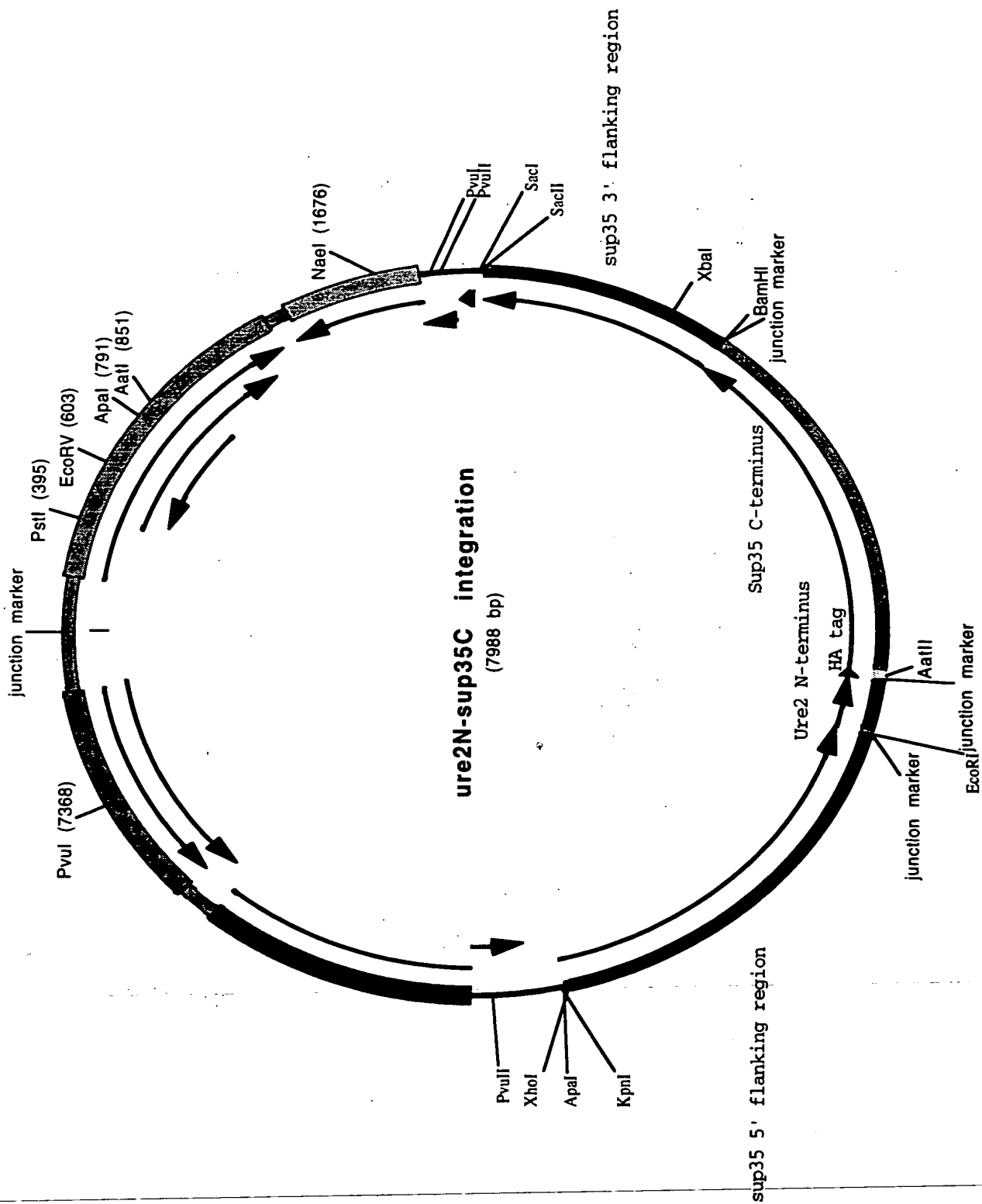


FIG. 2

1 TCGCGCGTTT CGGTGATGAC GGTGAAAACC TCTGACACAT GCAGCTCCCG GAGACGGTCA CAGCTTGCT GTAGCGGAT GCCGGGAGCA GACAAGCCCG
04
101 TCAGGGCGCG TCAGCGGGTG TTGGCGGGTG CTTAACTATG CGGCATCAGA GCAGATTGTA CTGAGAGTGC ACCATACCAC AGCTTTTCAA
201 TTCAATTCAT CATTTTTT TTATCTCTTT TTGATTTT GGTCTCTTG AAATTTTTT GATTGGTAA TCTCCGRACA GAAGGAAGAA CGAAGGAAGG
301 AGCACAGACT TAGATTGGTA TATATAGGCA TATGTAGTGT TGAAGAAACA TGAATTTGCC CAGTATCTT AACCCAACTG CACAGAACA AAACCTGCAG
401 GAAACGAAGA TAAATCATGT CGAAAGCTAC ATATAAGGAA CGTGCTGCTA CTCATCTCTAG TCCGTGTGCT GCCAAGCTAT TTAATATCAT GCACGAAAAG
501 CAAACAACT TGTGTCTTC ATTTGATGTT CGTACCACCA AGGAATTACT GGAGTTAGTT GAACATTAG GTCCCAAAAT TTGTTTACTA AAAACACATG
29 Q T N L C A S L D V R T T K E L L E L V E A L G P K I C L L K T H
142 C V F K H A E N S T R V V L S N S S N T S A N P G L I Q K S F V C T
EcoRV (603)
601 TGGATATCTT GACTGATTTT TCCATGGAGG GCACAGTTAA GCCGCTAAG GCATTATCCG CCAAGTACAA TTTTCTACTC TTCGAAGACA GAAAATTTCG
62 V D I L T D F S M E G T V K P L K A L S A K Y N F L L F E D R K F A
109 S I K V S K E M S P V T L G S F A N D A L Y L K K S K S S L F N A
701 TGACATGGT AATACAGTCA AATTCAGTA CTCTGCGGT GTATACAGAA TAGCAGAATG GGCAGACATT ACGAATGCAC ACGGTGTGTT GGGCCAGGT
95 D I G N T V K L Q Y S A G V Y R I A E W A D I T N A H G V V G P G
76 S M P L V T L N C Y E A P T Y L I A S H A S M V F A C P T T P G P
AatI (851)
801 ATTGTAGCG GTTGAAGCA GGCGGAGCA GAACTAACAA AGGAACCTAG AGGCCCTTTG ATGTTAGCAG AATTGTCATG CAAGGGCTCC CTATCTACTG
129 I V S G L K Q A A E E V T K E P R G L L M L A E L S C K G S L S T
42 I T L P K F C A A S S T V F S G L P R K I N A S N D H L P E R D V P
901 GAGATATAC TAAGGTTACT GTTACATTTG CGAAGAGCA CAAAGATTTT GTTATCGCT TTTATGCTCA AAGACATG GGTGCAAGAG ATGACGTTA
162 G E Y T K G T V D I A K S D K D F V I G F I A Q R D M G G R D E G Y
94 S Y V L P V T S M
1001 CGATTGGTGT ATTATGACAC CCGGTGTGGG TTTAGATGAC AAGGAGAGCG CATGGGTCA ACAGTATAGA ACCGTGATG ATGTGGTCTC TACAGATCT
195 D W L I M T P G V G L D D K G D A L G Q Q Y R T V D D V V S T G S
1101 GACATTTA TGTGTGAAG AGGACTATTT GCAAAGGAA GGGATGCTAA GGTAGAGGT GAACGTTACA GAAACAGG CTGGGAAGCA TATTTCAGAA
229 D I I I V G R G L F A K G R D A K V E G E R Y R K A G W E A Y L R

FIG. 3A

5359 ACTTGTAAACGGTCAGGTAATTGGGAAGGCGCTTAGGTGAGCGAACGATGAAGATTTTGGCTAATGGTGGTCTCGACGATTCCTCCAGCTGATTCAAAGGTTTTTCTTT
 5471 TGTGGTTTCGCCAGCTTCCTCTTTGGGTGCTTCAGACTTATCCTTCTTATCCTTTTCTCTCCCTTTTCGCCCTCCTCTGTTCGGTATTGTGCTTCAATTCTGTTTCAGTGCC
 5583 TTCAATATGGTGGAAACACCTATTAAACGGGTTAATAAGTCGTTTAAACCTGTTTGCCCTGTGGTTGGTTCCTATTATTCTCTGGCAGTATTACAATGGTAATATGATGGATACTTT
 Xhol Apal KpnI
 5695 C TCGAGGGGGG GCCCGGTACC CAGCTTTTGT TCCTTTTAGT GAGGGTTAAT TCCGAGCTTG GCGTAATCAT GGTCCATAGCT GTTTCCTGTG TGAATATGTT
 5796 ATCCGCTCAC AATTCCACAC AACATACGAG CCGGAAGCAT AAAGTGTAAG GCCTGGGGTG CCTAATGAGT GAGGTAACATC ACAATTAATTTG CGTTGGCGTC
 PvuII
 5896 ACTGCCCGCT TTCCAGTCTG GAAACCTGTC GTCCAGCTG CAITTAATGAA TCGGCCAACG CGCGGGGAGA GCGGGTTTGC GTATTGGGCG CTCTTCCGCT
 5996 TCCTCGCTCA CTGACTCGCT GCGCTCGGTC GTTCGGCTGC GCGGAGCGGT ATCAGCTCAC TCAAAGGCGG TAATACGGTT ATCCACAGAA TCAGGGGATA
 6096 ACGCAGGAAA GAACATGTGA GCAAAAGGCC AGCAAAAGGC CAGGAACCGT AAAAAGGCCG CGTTGCTGGC GTTTTTCAT AGGCTCCGCC CCCCTGACGA
 6196 GCATCACAAA AATCGACGCT CAAGTCAGAG GTGGCGAAAC CCGACAGGAC TATAAAGATA CCAGCGGTTT CCCCCTGGAA GCTCCCTCGT GCGCTCTCCT
 6296 GTTCCGACCC TGCCGCTTAC CGGATACCTG TCCCGCTTTC TCCCTTCGGG AAGCGTGGG CTTTCTCATA GCTCAGCTG TAGGTATCTC AGTTCCGGTG
 6396 AGGTCTGTTG CTCCAAGCTG GGTGTGTGC ACGAACCCCC CGTTCAGCCC GACTATCCGG CTTATATCGT TAACTATCGT CTTGAGTCCA ACCCGGTAAG
 6496 ACACGACTTA TCGCCACTGG CAGCAGCCAC TGGTAACAGG ATTAGCAGAG CGAGGTATGT AGCGGTGCT ACAGAGTTCT TGAAGTGTG GCCTAACTAC
 6596 GGCTACACTA GAAGGACAGT ATTTGGTATC TCGGCTCTGC TGAAGCCAGT TACCTTCGGA AAAAGAGTTG GTAGCTCTTG ATCCGGGCAA CAAACCACCG
 6696 CTGGTAGCGG TGGTTTTT TTTTGCAAGC AGCAGATTAC GCGCAGAAAA AAAGGATCTC AAGAAGATCC TTTGATCTTT TCTACGGGGT CTGACGCTCA
 6796 GTGGAACGAA AACTCAGCTT AAGGGATTTT GGTCATGAGA TTATCAAAAA GGATCTTCAC CTAGATCCTT TTAATATAA AATGAAGTTT TAAATCAATC
 6896 TAAAGTATAT ATGAGTAAAC TTGGTCTGAC AGTTACCAAT GCTTAATCAG TGAGGCACCT ATCTCAGCGA TCTGTCTATT TCGTTTCATCC ATAGTTGCCT
 2864 W H K I L S A G I E A I Q R N R E D M T A Q
 6996 GACTCCCGCT CGTGTAGATA ACTACGATAC GGGAGGGCTT ACCATCTGGC CCCAGTCTG CAATGATACC GCGAGACCCA CGCTACCCGG CTCCAGATTT
 2644 S G T T Y I V V I R S P K G D P G L A A I I G R S G R E G A G S K
 7096 ATCAGCAATA AACGAGCCAG CCGGAAGGC AGTGTCTCTG CAACTTATC CGCTCCATC CAGTCTATTA ATTGTTGCCG GGAAGCTAGA
 2314 D A I F W G A P L A S R L L P G A V K D A E M W D I L Q Q R S A L

FIG. 3D

006090"EE9T6560

7196 GTAAGTAGIT CGCCAGTTAA TAGTTGCGC AACGTTGTTG CCATTGCTAC AGGCATCGTG GTGTACGCT CGTCGTTTGG TATGGCTTCA TTCAGCTCCG
1974 T L L E G T L L K R L T T A M A V P M T T D R E D N P I A E N L E P
7296 GTTCCCAACG ATCAAGCGGA GTTACATGAT CCCCATGTT GTCAAAAAA GCGGTTAGCT CCTTCGGTCC TCCGATCGTT GTCAGAAAGTA AGTTGGCCCG
1644 E W R D L R T V H D G M N H L F A T L E K P G G I T T L L L N A A
7396 AGTGTATCA CTCATGGTTA TGGCAGCACT GCATAATTCT CTTACTGTCA TGCCATCCGT AAGATGCTTT TCTGTGACTG GTGAGTACTC AACCAAGTCA
1314 T N D S M T I A A S C L E R V T M G D T L H K E T V P S Y E V L D
7496 TTCTGAGAAT AGTGTATCGG GCGACCGAGT TGCTCTTGCC CGCGTCAAT ACGGATAAT ACCGCGCCAC ATAGCAGAAC TTATAAAGTG CTCATCATTTG
974 N Q S Y H I R R G L Q E Q G A D I R S L V A G C L L V K F T S M M P
7596 GAAAACGTC TTGCGGCGGA AAATCTCAA GGATCTTACC GCTGTTGAGA TCCAGTTTGA TGTAAACCCAC TCGTGACCC AACTGATCTT CAGCATCTTT
644 F R E E P R F S E L I K G S N L D L E I Y G V R A G L Q D E A D K
7696 TACTTTCACC AGCGTTTCTG GGTGAGCAA AACAGGAAGG CAAAATGCCG CAAAAGGG AATAAGGCG ACACGGAAAT GTTGAATACT CATACTCTTC
314 V K V L T E P H A F V P L C F A A F F P I L A V R F H Q I S M
7796 CTTTTCAAT ATTATTGAAG CATTATCAG GGTATATGTC TCATGAGCGG ATACATATTT GAATGTATTT AGAAAAATAA ACAATAGGG GTTCCGGCGCA
7896 CATTTCGCCG AAAAGTGCCA CTTGACGTCT AAGAAACCAT TATTATCATG ACATTAAACCT ATAAAAATAG GCGTATCAG AGGCCCTTTC GTC

junction marker

FIG. 3E

Spontaneous conversion rate
([*psf*] \rightarrow [*PSH*])

Sup35

C

N M

WT NM



10^{-6}

-4 repeats

Repeat deletion
Mutant (R Δ 2-5)



$< 10^{-8}$

+2 repeats

Repeat expansion
mutant (R2E2)



5×10^{-3}

FIG. 4

Spontaneous conversion of Sup35 repeat mutants